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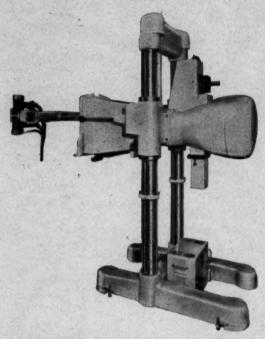
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- (1) Bavin, E. M. & James, B., J. Pharmacy & Pharmacol., 1953, 5, 849.
- (2) Schonholzer, G., Lauener, H. & Hurni, H. Schweiz: Med. Wschr., 1955, 85, 222.
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AN AFFAIR BETWEEN PHILOSOPHY AND MEDICINE *

By A. J. Dalzell-Ward, M.R.C.S., L.R.C.P., D.P.H. Deputy Medical Director, Central Council for Health Education

Imagine yourself confronted by a Rorschach ink-blot. As you stare at the structureless material a vague outline appears, and then details are visible. There is something familiar—something reminiscent of Town Halls and public monuments up and down the country. Here are symbols which expressed the faith of a previous generation and commemorated their achievements.

There are temple-like buildings, lit up by the spiky rays of an enormous sun, cascades of pure water, vistas of parks and gardens, houses all alike in their orderly perfection. There are human figures, some in academic robes with arms upraised towards the sun, while others with serious faces carry microscopes, or chemical apparatus. There are a few massive goddesses displaying the conventional semi-nudity which was permitted in Edwardian civic architecture. Some carry sheaves of wheat or baskets of fruit, and some, with one arm encircling the neck of a docile cow, gesture with a pointing forefinger to the sun. Surrounding the picture, like a continuous frieze, are the humbler but important elements. There are big, bearded men weating curious rounded caps with small peaks, and corduroy trousers-not in the modern mode, but girt below the knee with leathern garters. Some carry drain pipes, picks and spades; the parts of water closet. Others are seen only with their heads and shoulders emerging from a hole in the ground in which they are digging. Wheels, chimneys, steam engines, pumps, cranes, locomotives and ships crowd the frieze, while at each corner various insects brood in somewhat disappointed contemplation. We can see no movement. This is a complete and finished picture—it is the final answer.

We can be certain that many of us would not be here today but for the solid achievement symbolised in such a scene. It can be in no sense of belittlement that we point to the different problems that we have to solve, but it is interesting and rewarding to study the trends in intellectual thought and philosophy which lay behind that age, and so to emphasise the need for new philosophies in our own time.

Public Health, as symbolised in this picture, grew up in an age which believed in material progress and which was as remarkable for its materialism as for its insistance on the outward show of religious observance. In any age official opinion seizes on any new science whose mode of thought is congenial. In the nineteenth century our forefathers had two alternatives—the concept of health deduced by Claude Bernard and Virchow from their researches, and the

concept of disease produced (almost by inspiration) by Pasteur and those who followed him. The first line of thought offered no practical solution to the problems of the day; the second not only offered a solution but was in accord with the belief in material progress and man's mastery of nature, so characteristic of the age. Public Health, therefore, was the translation of bacteriological discovery into terms of domestic and community hygiene. Even this was in advance of bacteriology, as it will be remembered that we owe sanitary reform as much to the erroneous miasma theory as to bacteriology—the means were almost identical.

In such a concept, the pathological entity was the epidemic, the community the unit of study. A clinical service—the fever hospital—was a preventive instrument in that it drained the reservoir of infection. Thus one particular kind of physician came to be regarded as a practitioner of preventive medicine. The moral is obvious to those who are concerned in the modern controversy concerning the child welfare centre.

A public health tradition grew up which was community centred and epidemiologically minded, and when personal health services arrived this tradition was maintained. So strong is this tradition that the term epidemiology is now applied to the study of any disease—a trend which is strongly criticised in some quarters. Health education has found itself caught up in the remnants of an old tradition, while trying to create a new one. I would like here to quote Galdston's words (1954), although I think that they could be challenged in this country. "We belabour the public about their chances of falling victims to this or that plague, disease or affliction." He complains that the greater portion of health education effort is directed to propaganda about disease. Not, I repeat, in this country, nor according to the concepts worked out by the WHO Expert Committee on Health Education—but not so long ago the criticism would have been just.

The traditional epidemiological approach, therefore, has its limitations today, and there are signs that a return to a physiological approach has begun. This will involve also a return to person-centred preventive medicine, and this change will be looked on as being as revolutionary as the community approach in a former age. And yet we shall find that the community, being but individuals in the aggregate, will eventually benefit. To quote Galdston (1954) once more, "Public Health must be concerned even more with the deprivational and stress sources of morbidity."

Today we are no longer satisfied as to the inevitability of material progress, and of recent years the dignity of the human personality has so often been offended as to stimulate a return to interest in non-material values. There has also been a re-examination of our traditional medical beliefs. This has been painful to many, who have displayed the typical psychological reaction similar to that shown by 19th century surgeons when confronted by Lister. The

^{*} An address to the Maternity and Child Welfare Group, Society of M.O.H., April 22nd, 1955.

historian can always detect the beginning of an age by the dates of certain significant publications—1776, for example, saw "The Wealth of Nations" and "A Fragment of Government." 1954 gave us a wealth of newly published material which, I suggest, will ultimately assume a similar significance. These publications, to which I shall refer, contain a mass of carefully thought out philosophy and deduction from experience which point the way to the future in Public Health generally and Health Education in particular.

I have already quoted from "Beyond the Germ Theory," edited by Iago Galdston. This is a symposium by several authors on the various aspects of stress and deprivation. Galdston's own article is based on Claude Bernard's aphorism that "Man in health is a piece of constancy living and moving in a world of variables." This brilliant deduction was obscured by the work of his great compatriot and contemporary. Pasteur worked apparently by inspiration—he made brilliant leaps in the dark. In his work on rabies, for example, he rushed into the field of immunisation apparently ignoring all that was wise or cautious. It is doubtful whether Metchnikoff was disapproving or lost in admiration when he wrote (1933):—

"Certaines considérations extérieures arrêtèrent son choix sur la rage. Quoi qu'il ait réussi ni à decouvrir le microbe de cette maladie ni à obtenir des cultures du principe infectieux, cependant il résolut de facon geniale le problème qui s'était posé."

It was hardly surprising that in such an age the urge towards the achievement of health could be based on the complete control or eradication of pathogenic organisms or, alternatively, the conferring of an artificial immunity by vaccination. In the determination to assign a bacterial cause to every disease many dubious claims were made—some even in our own times. Outside our professional ranks an occasional acute intellect such as that of Bernard Shaw has drawn attention to the domination of medicine by bacteriology, and that this has distracted attention from other profitable studies. This has made diagnosis concentrate on the established irreversible lesion rather than on the preliminary physiological maladjustment which precedes disease. Virchow already had this idea, and a quotation from his works illustrates this:—

"Disease itself is life, a life under changed conditions, and it does not matter whether the change was effected by internal or external causes. The disease is represented by the change in the cells of the body. A cell can have its origin only in another cell. But the task of medicine is not to explain all disease by a single principle, as the various systematists tried to do, but to observe disease objectively with every tool given to us by the sciences of physiology, chemistry and physics. Then on the basis of our knowledge of normal and pathological anatomy we can infer the changes that the disease has wrought in life."

Now interest is revived in physiological mechanisms underlying immunity, and a somewhat revolutionary viewpoint is gaining strength as to how to solve the problem of infectious diseases. An attack on the pathogen itself is considered as of less importance than a stimulation or maintenance of the physiological mechanism of immunity. Certainly vigorous frontal attacks by antibiotics have produced unfortunate results, and so many pathogens are normal commensal inhabitants of the body that immunisation seems superfluous. We find epidemiologists prominent in this field—it is not the detached philosophers or the unpractical idealists, but the men who are daily at grips with pathogenic bacteria.

Thus The Lancet (1955) quotes from Magill's Presidential Address to the American Association of Immunologists in which the speaker said that the aims of preventive medicine should be less to eliminate an infection than to come to terms with it. Attempts at elimination have been less strikingly successful than the decline in mortality rates suggests. The mortality rates of measles, pneumonia, tuberculosis and diphtheria began to decline before preventive measures could have taken effect. In this country a study by Thomson (1955) in the Ministry of Health shows that the acceleration in the rate of decline in mortality of some of these diseases was greater in Victorian times than today.

Sir W. Dalrymple-Champneys (1955) in his Presidential Address to the Section of Comparative Medicine of the Royal Society of Medicine says that to explain the phenomena of infectious disease in terms of micro organisms, protective antibodies, and phagocytes is as inadequate and unfruitful as to account for falling in love in photographic terms. In undulant fever, for example, there is considerable variation in the reaction of the tissues to brucella abortus in the same patient. In some cases the illness clears up completely, although the organism remains in the body. Again, the natural decline in mortality from tuberculosis has not been due to a decreased virulence of the organism, while tuberculin surveys show that the infection is as ubiquitous as ever. The author quotes the view of Dubos in support of his arguments, and he has been taken to task by the commentator in *The Medical Officer*, who notes with some asperity that Sir Weldon quotes Dubos-" apparently with approval." Dubos-an American-believes that the mortality curve from tuberculosis has not been affected largely by all the measures undertaken to combat this disease.

Sir Weldon concludes that there are non-specific physiological factors in parasitism which have been neglected. Endocrine influences, diet and "cosmi" influences in the environment may be concerned. He even speculates on the possibility of sunspots as a factor in altering cycles of epidemics. Certainly the influenza pandemic of 1918 cannot be explained by orthodox epidemiological concepts.

It is interesting to see that such ideas are accepted by laymen, who usually tend to be "more royalist than the King" when it comes to orthodox medicine. Sir Geoffrey Vickers (1955) in an address to a Mental Health Conference said:—

"I venture on these speculations because I feel that we laymen, dazzled by the result of defeating bacteria, tend to think that the rôle of science is to remove hazards rather than for us to face them. . . . I do not believe that it is true of physical science, or even of medicine, except at a price which we should be unwilling to pay."

Here is a timely warning against a danger which might arise from a concept of health based on the maintenance of a physiological equilibrium. We recognise as an axiom of physiology that function depends on use; therefore no stress—no defence! Galdston points out that "the sudden advent of marked stress situations is inherent in human growth and development—and is normal to experience." Equilibrium demands an interplay of forces and the human organism must be an active one, using its own internal resources.

Now I turn to Galdston's Monograph (1954) "The Meaning of Social Medicine." All treatment and prevention depend fundamentally on non-specific resistance, which no method of natural science can measure directly. Man obtains optimum health by development and maintenance of good relationships with his fellows. Here an emotional and psychological element is introduced which has been studiously avoided by the epidemiologists. It points to the science of human relations as the core of public health practice in the future, with the corollary that health education will form the principal instrument.

The two elements are brought together in a British publication, "Modern Trends in Psychosomatic Medicine," which is a symposium by several authors under the editor-ship of O'Neill (1955). I must confess myself puzzled by the attitude of the reviewer in The Medical Officer (1955) who seems worried lest any reader should assume that psychosomatic medicine obviates the need for the study of the basic sciences. I fully agree with him that without the basic sciences the doctor would be little better than an empiricist—"little better than a quack, an uninspired technician working by rule of thumb." Yet I feel that the criticism of the medical curriculum, by some of the authors contributing to the symposium, is also just. The fact is that in addition to the basic sciences, instruction in human behaviour and the structure of the personality and the effect of the mental climate is also needed. Certainly I hold that Health Education is empirical and even dangerous without a thorough understanding of the basic sciences which make

up medicine—if only because of the intellectual discipline these involve; they do not permit of wishful thinking or dishonest solution.

The psychosomatic concept becomes more acceptable the more one knows. You would not expect the man in the street to believe that fear could cause uterine inertia because he would have no idea of the physiology of the uterus, its behaviour in labour, nor its connection with the central nervous system.

We have two sets of facts to help us.

Firstly there is the domination of the body by the nervous system. It is the first system to be organised i : the fertilised ovum, the neural streak appearing at the second week of intra-uterine life. We also know that the subsequent development of the body is governed by the nervous system and behaviour patterns produced by stimuli. Studies of ll very young creatures show that survival and development depend upon certain behaviour, sometimes in conunction with the mother, and if anything interferes with natural behaviour, then life or health is threatened. It is most elementary to state that survival depends upon suckling, but Mavis Gunther (1955) has thrown new light on this matter. She points out that in the human situation the mother must take the initiative and put the baby to the breast, and that the baby is led to suck by tactil stimuli alone—by touch on the circumoral area or inside the mouth itself. The nipple must be of the right shape—it is a "sign stimulus "-and the breast and nipple must fill the baby's mouth completely, otherwise the baby is ap thetic.

In the animal world it is well known that development depends on behaviour. Kittens and puppies that are not licked will die of renal failure. The significance of the skin is obvious; it is an end organ at the beginning of an afferent pathway, and once—in the first days of intrauterine development—shared the same mother substance as the nervous

system.

Activity and stimulation are primary needs for development and the maintenance of health. If you keep a horse tied up without exercise, he will become ill. If you keep him isolated in a field away from horse or human contacts, he will lose appetite and weight. Talk to him, or put him with other horses, and he will thrive. All this has nothing to do with the nutritive quality of oats or grass on the one

hand, or infection by parasites on the other.

The second set of supporting facts are those concerned with the physiology of nerve cells, and in particular of reflex action. The studies of Sherrington and his colleagues on reflex activity in the spinal cord discredited the older mechanical concept of the nervous system as a telephone exchange. Stimulation of an afferent nerve creates a pool of central excitatory state in the central neurones. When the pool reaches a certain concentration it discharges along an efferent path. Efferent impulses can be of two kinds, stimulating and inhibiting. Muscular activity, for example, necessitates inhibition of antagonists.

These early observations were made on neurones whose function was motor and which could thus be easily measured. The physiologists of the Pavlov School, however, have been able to demonstrate a multitude of conditioned reflexes affecting the various organs of the body—even the blood, it being claimed that a leucocytosis can be produced by a

it being claimed that a leucocytosis can be produced by a conditioned stimulus. (Ruscoe Clark, 1955).

Now all conditioned reflexes must have an afferent pathway involving the sensory system, so that even a leucocytosis can be produced by psychic stimuli entering via the ears, eyes, nose or skin. We have no reason to believe that the physiology of the central neurones in the frontal lobes is different from those in the spinal cord. They look the same shape, and have the same intracellular structures. They are being continually bombarded with afferent stimuli which must, presumably, create a central excitatory state. This must in time discharge—but which pathway does it choose? In a straightforward case where a rebuke causes annoyance, then the discharge might be along a motor path by a blow or throwing a brick. Suppose that there was some internal inhibition, and instead of discharging down the

motor path the excitation flowed along parasympathetic routes to the stomach. Then the stomach would contract painfully. This does not suggest that it is healthy to reply to rebuke by immediate aggression—this may be normal in the child—but evasive manoeuvres to overcome the difficulty, such as suppression or denial, are harmful. In terms of behaviour, when we meet a stress we can run away, fight it, accept it, or evade it. The last-named is harmful, and is a typical manoeuvre of an insecure personality.

What does a herring gull do when it meets with an in-tolerable situation? Tinbergen, lecturer in animal behaviour at Oxford, tells us. When a male herring gull meets another, the first instinct is to fight. Each offers combat to the other, and appears to be under great tension. Suddenly, abandoning the attitude of combat, one bird will proceed to pull grass." This is behaviour typical of that of building a nest, but it occurs outside the nesting season, and the unusually vigorous pulling and throwing away of the stalks of grass suggests that the action is not purposive. It is attractive to believe that for a gull this represents play activities, or even artistic activities, like the painting and modelling which relieve the tensions of maladjusted children. In this behaviour we see the prototype of stress "conversion" manoeuvres in the more complicated human relationships. It is possible that inability to resolve conflict thus causes psychosomatic illness in susceptible persons

We are now in a position to build up a concept of health on a basis of equilibrium in the face of stress. The complete personality must be accepted, mental and physical aspects being indivisible. We can postulate needs and, as a corollary, deprivation. Then there are the stresses. Needs and stresses comprise both concrete and abstract entities. Now the work of Selye, with its emphasis on the pituitary-adrenal axis, which came into great prominence a few years ago, met with considerable scepticism because it suggested that stresses were themselves the cause of disease. This would obviously be false, and a personal susceptibility has always been recognised. In a Canadian investigation (Wheeler, 1950) for example, exposure to noise in an industrial plant caused no impairment of hearing in some employees even after 10 years. In others there was impairment in a few months. The observations of Spence et al. (1954) bring us much nearer a true explanation. They found that infants thrive well even in bad surroundings when they have good mothers. Here the mother was supplying all the infant's needs and presumably making him more resilient in his bad environment. It seems, therefore, that the primary factor in producing disease is deprivation. This produces a defect in the organism which is then susceptible to stresses. The defect is at the physiological level and represents the entity which Virchow suggested. In such a scheme bacteria would be classified as a stress, food as a need, and malnutrition, as a defect. In the emotional field affection, esteem, status, and acceptance by the group are needs, deprivation leads to the defect of insecurity, with aggression, anxiety or jealousy as the stress. Although some stresses like a bad environment can and should be removed, it would be impracticable to remove all stresses, and indeed the result might be the cessation of all activity.

The physician's rôle must be to diagnose the point of departure from satisfactory adjustment to stress. This is a physiological lesion, but it should not be beyond the ingenuity of medical men to devise new clinical tests. The methods adopted by my colleagues and myself in our Study of the Epidemiology of Health (1954) showed that novel methods of measurement of performance in the physical and mental field could provide a guide in assessing positive health. Again, as MacKeith (1954) points out, there is still scope for the intuitive approach. The result will be a diagnosis of abnormal behaviour; then the teacher's rôle will be to help parent and child—if old enough—to gain an insight into the unhealthy behaviour. In the field of infant welfare the problem will eventually hinge on the mother-child relationship, with co-existent family relationships a very important factor.

Feeding Difficulties

I have chosen three topics in the field of child health as practical examples of the application of this philosophy. Firstly, feeding difficulties. Some years ago, when I was making a study of infant mortality, I was startled to receive a death certificate with the diagnosis of "Feeding Difficulty." I do not know what were the comments of the General Register Office. A visit to the house and a review of the history showed that the child was born in hospital, weight about 8 lb. at birth, and was normal in every respect. Mother and child were discharged home before the 10th day. This was the first child of an intelligent couplemother aged 28-living in a comfortable home with every convenience. Shortly after return home it was suspected by the mother that the child was not thriving. Advice was given to change from breast feeding to one of the proprietary brands of dried milk. After the first feed of this milk the child vomited, and continued to do so after each feed. A further change was made to another brand of dried milk. Vomiting continued, and so a change was made to National Dried Milk. By this time the child was dehydrated and going downhill fast. It finally died, because the dehydra-tion and disturbance of electrolyte balance had passed the point when the condition could be reversed. No form of infection was discovered, and no developmental abnormality.

Here, I believe, there was a failure to interpret the significance of the vomiting after removal from the breast. Removal from the breast was a deprivation and a stress at the same time. Vomiting is a characteristic gesture of rejection of a strange or hostile food. Whether the child should have been removed from the breast is another matter. It is interesting that this case occurred only a month after the publication of Waller's paper which revealed the fallacy of test weighing in the first two weeks of life (1950).

Respiratory Diseases

Next come the respiratory diseases. Bronchitis and pneumonia account for a substantial part of neonatal mortality, but bacteriological studies—particularly those by Mendez and Likar (1952)—are puzzling and show that the matter is not a simple relationship between host and parasite. In the family group the pneumococcus is found more frequently in the throats of infants and young children than in adults. Yet all babies do not get pneumonia. Oswald's studies (1954) show that bronchitis is associated with the production of excess of mucus, and that the physiology of the mucus-secreting elements of the bronchial tree is the important factor. In health the respiratory tract is covered with a thin film of mucus. Solid particles adhere to its surface and noxious gases are dissolved before reaching the alveoli. Air is humidified chiefly in the nose and in 24 hours in the adult this can involve the transfer of 400 ml. of water from the mucosa to the inspired air. When there is excess mucus associated with oedema of the mucous membrane, then humidification and warming of inspired air falls mainly on the trachea and bronchi, whose relatively poor blood supply renders them less well adapted for this function. Furthermore, the normal mechanism of evacuation of the bronchus by the cilia is overcome. Normally the cilia can transfer 150 ml. of mucus every 24 hours, but when the quantity is excessive all that happens is a useless churning action. Studies of mucus show that it can lower resistance to bacteria, investing the latter with a protective coat.

What is the cause of excess of mucus? It may be a stimulation of the mucous glands by over-drying in an atmosphere of low humidity. It may be a hyper-sensitivity phenomenon—it may be response to stress. It is a common observation that babies with pneumonia do better when their mothers are admitted to hospital with them. Stimulation of the baby's skin affects the depth of respiration and, like all other young animals, physical contact with the mother may be responsible for initiating the function of various organs, including the lungs. The problems of asthma may be related to this—not that every child reacts to the same stress in the same way.

In the problem of prevention of respiratory diseases in infancy, then. Although we should naturally guard the child against a virulent infection imported from without, at the same time we should encourage as much mothering as possible—and attend to the temperature and humidity of the environment. A whirling hygrometer might be more valuable than a stethoscope in this work.

The Endocrine System

Then the endocrine system. In Maternity and Child Welfare work we are more concerned with these glands than is any other doctor. The entire phenomena of conception, pregnancy, delivery and lactation are the work of the endocrine complex, which is naturally subjected to an unusual stress. Unfortunately, we have been trained in the diagnosis of established endocrine dysfunction rather than in recognising the situations where adaptation to stress may fail. Consider the pituitary gland and post-partum haemorrhage, for example. For years, cases of Simmonds' disease have been recognised in women, who had a severe post-partum haemorrhage. Post mortem, the gland has been completely necrotic and occupied by a large blood clot. Because of the method of approach and the sequence of events, it has always been taught that post-partum haemorrhage caused pituitary necrosis. It is difficult to accept this logically. We can accept that a severe haemorrhage may cause a thrombosis, but why selectively in the pituitary gland? Considering that the uterine contractions are under the control of the pituitary body, is it not more likely that the primary lesion was in the gland?

If this is so, then what is the cause of the lesion in the pituitary? A most striking case was described by Reiss (1943) in which acute pituitary failure occurred in a girl of 23 as a result of an emotional shock. The condition was reversed entirely by psychotherapy, without any glandular injections. Reiss comments on the many cases in which emotional stress results in inhibition of the pituitary functions, and he reminds us of the neural pathway leading from the frontal cortex via the hypothalamus to the pituitary

stalk

Thus we see the importance of human relationships in pregnancy. Damage to the particularly delicate relationship between husband and wife will cause emotional stress in the latter. It is quite likely that inhibition of pituitary function will occur which, even if it does not lead to the tragic Simmonds' disease, will cause a severe post-partum haemorrhage and failure of lactation. Midwives should be aware of this and should look out for signs during the ante-natal

It is remarkable how these modern studies bridge the gap between this age and that of Claude Bernard. But for the neglect of philosophy by medicine a parallel advance would have been made which, without robbing bacteriology of its triumphs, would have brought us nearer to the prevention of all illness. Thus I have given my lecture its curious title. Why philosophy? Because philosophy concerns itself with values and strives to understand man's place in the universe. Because it can measure every event by the simple standard of truth, and it is, therefore, the support of natural justice. Often its revelations undermine authority, but where the latter is not in the general interest no anxiety should be caused on this score. Compare these two statements—the second admittedly fiction, but full of possibilities.

Claude Bernard said :-

"It is the fixity of the internal milieu which is the condition of a free and independent life."

Then from " 1984 " :-

"We shall abolish the organism," said O'Brien, "our neurologists are working on it now."

We see an awful vista of medicine as an instrument of oppressive policy in a State which has destroyed natural justice, presumably with the consent of its people. It is not only in the totalitarian state that technological medicine is represented in a guise which is as ludicrous as it is disturbing. Mr. Nicholas Monsarrat, who has no superior even if he has a peer in an acute perception of human personality,

describes the antics of the American physicians who set to work to investigate Esther Costello. Such satire is not the product of imagination.

Philosophy is concerned solely with truth. Dr. Walker (1954), himself a philosopher, commenting on a demand

for a philosophy of medicine, wrote :

"... how embarrassing [his] demand when so much of contemporary philosophy has limited itself to problems of epistemology and semantics, becoming thereby the lackey of the natural sciences instead of being their interpreter."

Then why should I mention an "affair"? Because the attempts at union have never been regularised. Philosophy has remained steady and potent-Medicine has been the fickle or the frigid partner. Not that they have never attempted consummation-they have produced many still-

borns, or prematures which have not survived.

This is where Health Education comes in. liberating force which should throw up its own Voltaires. In its modern form it retains a respect for the beliefs and aims of people rather than attempting to impose standards upon them. At the same time, it must never shrink from placing the public in full possession of facts, and here the rôle of the health educator as the detached critic is most

important.

In the clinical work of the Public Health Service lies the greatest opportunity for health education. In the problems and their attendant anxieties that mothers and children bring to the doctor there is an opportunity for teaching, not in a didactic way, but by methods in which the mother is herself a partner. The group situation, with its own peculiar value, can be created in clinics and schools. For this task the doctor will bring the basic skills in medicine with a superadded knowledge of the normal growth and development of children. He will also have to be a student of behaviour and gradually he will build up the clinical acumen which will enable him to diagnose the first point of departure from normal adjustment to stress. In all his work he will bring to bear the critical attitude of the philosopher. Other critics may say that this is nothing more than the practice of medicine, but it is also true that at the present time the clinical services of the local health authorities are the logical centre for the development of this new concept of medical practice.

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CHILDREN NEGLECTED IN THEIR OWN HOMES*

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Towards the end of the war the public conscience became aware of the undesirable treatment, sometimes by injudicious or even brutal action but more often by failure of provision of material and non-material means, of certain children deprived of their parents or of a normal home life. After the end of the war the Curtis Committee was set up and this examined very many witnesses (surprisingly these did not include a single Medical Officer of Health) and eventually published a report. Many of the recommendations in this report were embodied in the Children Act, 1948, which laid down among other things that the major local authorities should form a Children's Committee to which all such matters should stand referred, and should appoint a Children's Officer. Although the logical choice of department in which this new official should work is that of the Medical Officer of Health, in view of his intimate concern with the physical and mental health of children in his area and of the already existing band of trained child visitors to be found in his health visitors, surprisingly enough it was only in a minority of cases that the Children's Officer was so established. In the majority of cases a new and separate Children's Department was set up with the Children's Officer directly responsible to the Children's Committee. It will be noted that the Children Act, 1948, is drafted to deal only with those children deprived of a normal home life and care. This forms an example of newspaper agitation, an essential safeguard in a true democracy, leading to hurried legislation and the consequent setting-up by each major local authority of a new and expensive separate service whose work could easily have been dealt with by an expansion of an already existing department.

It was soon realised that by its very definition the Children Act could not cover all cases of unfavourable environment and treatment of children, for if the child was not bereft of parents or normal home life then no alleviation to the child was possible unless other legislation (e.g. Children and Young Persons Acts) was being infringed. In 1949 it was raised in Parliament that local authorities were unable to act in cases of neglected and ill-treated children who were not included in the terms of reference of the Children Act unless it was shown that the neglect was likely to cause unnecessary suffering to the children concerned. The Under Secretary of State admitted that there was this gap in the social services and consulted his colleagues at the Ministries of Health and Education. In 1950 the Secretary of State stated in Parliament that the Government had considered this problem and had concluded that the present need was not for either an extension of statutory powers nor for an enquiry by a departmental committee, but for a fully coordinated use of already existing local authority services and other statutory services. In addition voluntary organisations were engaged in this field of work. It was of the greatest importance that early information reached the appropriate service in order that help could be given at an early stage before valuable time had been lost. If the right help was not given in time before deterioration had gone too far it might happen that children would have to be moved from their homes in cases where such removal could have been avoided by earlier action.

The Co-ordination Circular

On July 31st, 1950, a joint circular was issued by the Home Office and the Ministries of Health and Education drawing the attention of local authorities to their powers under the Children Act, the National Assistance Act and the Education Act. The local authorities were requested to make sure that the most effective use was made of the existing resources, and it was suggested :-

^{*} Paper read to the West of England Branch, Society of M.O.H.

- (1) That they should designate an officer to be responsible under them for enlisting the interests of those concerned and for devising arrangements to secure full co-operation among all the local statutory and voluntary services concerned with the welfare of children in their own homes;
- (2) That they should arrange for this officer to hold regular meetings of officers of the local authority and other statutory services and of representatives of the voluntary organisations;

(3) That they should arrange for significant cases of child neglect and all cases of ill treatment coming to the notice of any statutory or voluntary service in the area to be brought to the notice of this designated officer. The latter was then to arrange for such cases to be brought before the meeting so that, after consideration of the needs of the family as a whole, agreement might be reached as to how the local services could best be applied to meet these needs.

As is characteristic of our system of government, local authorities varied in the way in which this broad lead from the central government was followed in detail. Some authorities appointed the Medical Officer of Health, many appointed the Children's Officer, some appointed the Education Officer and some the Clerk. Authorities varied in their methods of achieving co-ordination, as is obvious must happen when one considers for example the different problems of compact county boroughs and the large agricultural counties. In the latter the administration often involved decentralisation of much of the work to sub-committees arranged on an area basis. In most areas the meetings included local authority officers, officers of other statutory services and representatives of local voluntary organisations.

Action in Exeter

The Exeter City Council considered carefully the joint circular and decided that the co-ordinating officer in respect of work done in the city area by statutory and voluntary bodies on behalf of children believed to be neglected or illtreated at home, should be the Medical Officer of Health. The following were invited to serve on a committee and all accepted this invitation :- Medical Officer of Health, Deputy Medical Officer of Health, Children's Officer, Chief School Enquiry Officer (representing the Director of Education), Superintendent Health Visitor, Assistant Housing Manager (representing the Housing Manager), Welfare Officer, Inspector, National Society for the Prevention of Cruelty to Children, and Secretary of the Exeter Council of Social Service.

It was originally intended to limit the composition of the Committee to these members, as the larger a committee the longer it deliberates before arriving at a decision on action to be taken. However, as cases came before the committee, it was realised that the views of other specialised workers were both useful and desirable, and accordingly the following were invited and now serve on this committee :- Hospital Almoner (of the main acute hospital of the Exeter Clinical Area), Moral Welfare Case Worker, Probation Officer, Educational Psychologist, and Child Psychiatrist (who attends when indicated).

The local chief officer of the National Assistance Board has also attended on one occasion, as has the home worker for the blind. The committee was given the title of "The

Exeter Child Care Committee.

The Medical Officer of Health acts as chairman (his deputy acting for him in his absence) and convenes the meetings monthly on a fixed day of the month, and at these meetings the notes are taken by the Clerk in Charge of the Maternity and Child Welfare Department. At these meetings, which last about an hour and a half, the new cases, of which there are usually two or three, are discussed in considerable detail. The rest of the time is taken up by progress reports on previous cases, these being brought up for consideration at intervals decided on at previous meetings, or if any urgent eventuality has made it desirable that they should be considered. A list of the cases to be discussed at the meeting is sent out with the notice of the meeting and this enables members to arrive at the meetings with all the

information they possess on the cases. Should any member be unable to be present, an apology is always sent, a token of the importance placed on the meetings, and their presence is usually much missed.

It was agreed from the beginning that :-

(1) To avoid flooding the committee only a practicable number of cases should be dealt with.

(2) The work of the committee should not be advertised to the

public.
(3) The number of visitors dealing with an individual case should be kept to a minimum.

(4) If an officer was already concerned with a case, then that case should, as far as possible, be left to him or her.

(5) No City Councillor or committee member of any voluntary body should be included on the committee, as this might result in some sub-conscious limitation of the discussion and hence some distortion of the committee's work.

Cases are referred from various sources, naturally most being referred by members. The majority of cases have come from the Health and School Health Departments, together with some from the Welfare Officer and Children's Officer. Head teachers occasionally refer cases, their channel being the School Health Department. The N.S.P.C.C. have referred only three cases, as the Society's inspector deals at once with the cases brought to his attention, and he feels these cases are adequately handled. He regards his work as complementary to that of the committee and this view has been accepted. Undoubtedly the cases of physical cruelty as distinct from neglect come within his purview. Thus the committee does not deal with all the cases of children suffering from cruelty or neglect in our

The members have proferred information freely, and usually a new case has already been known to several mem-However, when information has been given in a highly confidential manner to any officer, this has not been divulged unless it had immediate relevance to the case. Thus the pooling of information has been limited by certain mental reservations, and it is felt that this attitude is the correct one. As regards the limitation of the number of visitors, while this is always attempted it is not always possible, as in a complicated case more than one member may have a statutory obligation in regard to it. As the cases improve so the intervals between consideration are lengthened, until the case can be classed as "dormant." No prosecutions have been initiated by the committee.

One of the problems to present itself at an early stage of the committee's work was that of the family heading for eviction and where the children were being neglected. The mothers had little or no idea of the way of budgeting, nor did they always know their husbands' earnings nor even their jobs? As regards those Council tenants with which this committee was concerned, the Housing Committee agreed to co-operate, and none of such cases has been evicted. Also when any such families now appear to be heading towards eviction, the Housing Committee let the Child Care committee or the Secretary of the Council of Social Service know of the case. This worker has done much good work with such cases by persuading the husband to take the responsibility off his wife's shoulders by paying the rent himself, and she has helped the wife to save to pay off old debts. In this way several families have got themselves out of debt and now face the future with confidence, this new attitude resulting in demonstrably improved welfare of the children. It has been found that the root of this problem of inefficient budgeting is usually to be found in faulty matrimonial relationships. Another early recognised problem was that of housing. It quickly became evident that many of these families were living in bad housing conditions and that their problem was intensified by their own neglect. The Committee put up eight applications to the Housing Committee on behalf of such cases and in five cases the families were rehoused. Should such a family possess an undesirable reputation (moral or otherwise), this reacts unfavourably on the chances of such a family being rehoused. This results in the children having to

continue in a hopeless environment and this is wrong; it is most important that housing committees should be generous in their attitude to requests from such sources as this type of committee. On the other hand it is equally important that a child care committee should not become an easily entered back door to the housing committee. However irritating the social failure of a family living in bad conditions may be it must be remembered that "He who is down need fear no fall," and that the provision of better surroundings may be the one thing needed to break this vicious circle.

In necessitous cases the Medical Officer of Health has been empowered to supply a home-help free of charge for short periods. To illustrate the human difficulties encountered in this work, on two of the three occasions on which free home-helps have been offered, this assistance has been refused in spite of repeated urging by the health visitors.

Of the 43 cases dealt with up to June 1953, 25 have been virtually closed with the reservation that no case is definitely written off. Such cases which appear to have improved and become stablished are classified as "dormant" and at quarterly intervals are visited by a health visitor. These cases are then brought up before the committee at the end of 12 months, or earlier if the circumstances of a case warrant it. No case is regarded as hopeless and already the committee has justification for this view. Results, however, are rarely dramatic and the final evaluation of results must await many years. All members of the committee feel it has justified its existence and that valuable work has been done. To give tangible assistance as well as advice has the added advantage of facilitation of the acceptance of the advice, and therefore an appeal was made by the Medical Officer of Health to the citizens of Exeter for cast off children's clothing, bedding and such articles as prams now no longer needed, with gratifying results. These articles are stored in the Health Department and will be issued to members of the committee (including the Superintendent Health Visitor) on request. It can be said that the useful work of this committee can be summarised as the visiting of these neglected children and their families by a minimum of social workers, the successful presentation of such a visitor as the mother's friend and adviser, improvement in the budgeting and economic management of the household, and a substantial improvement in many cases.

Of the cases brought before the committee in only two was there evidence of physical cruelty and this only of a minor degree. Two referrals were on account of moral danger, but practically all were on account of general neglect, unhappiness, dirtiness, malnutrition, or living in a completely comfortless way. These adverse conditions have not usually been due to malice but to fecklessness, laziness, sub-normal intelligence, mental disorders, drink, and other factors involving, as a rule, the whole family. Consideration of these cases has underlined the uphill struggle of a mother not living with a husband (usually widowed, deserted, separated or divorced). Such a mother is in great difficulties and it is surprising how well many 'do manage to

keep a home going under this handicap.

The General Problem of Child Neglect

Having dealt with the details of the work of the committee and of the difficulties it has encountered it might be profitable to stand back a little and consider the general problem of child neglect against the background of the Exeter experience and of modern civilisation. The proper milieu for man is surely to be found in agricultural pursuits or in moderately sized centres of agricultural areas, not in swollen industrial cities where men are cut off from clean air, grassland, gardens and sun. The farther a man or a community becomes removed from proximity to the soil and consequent interest in it, the more unnatural and artificial becomes his or its mode of life and the more liable to departures from full health. In the country the ever present succession of crops and the rearing of livestock give stability of character and a true appreciation of the significance of life and of the place of death. It is not a coincidence that juvenile delinquency is mainly a town product. The

pleasant city of Exeter has its civic rank in virtue of its possession of a fine cathedral, but functionally it is the commercial, administrative and cultural centre of a large agricultural county. If the above reasoning is true one would not expect to find pronounced and widespread child neglect in it. In actual fact many of the 43 cases referred to the committee were of only moderate degree and included only one case (mild) of ill-treatment. One gets the impression that the drift of rural populations to towns is manifested more with the higher intelligences than with the lower ones, thus leaving a higher proportion of lower intelligences in the country than in the town. It is well recognised that low intelligence in the parents is an important factor in child neglect. The sparsity of neighbours in rural areas may cause child neglect to be unnoticed and the reverse may be the case in towns; on the other hand in a slum area, a lower standard of child care may be the norm. In the absence of full ascertainment it is only possible to form personal opinions as to the relative prevalence of child

neglect in rural and urban areas.

The other factor inimical to family stability is the developing pattern of our western civilisation. The accent is on rush to do things too quickly and an effort on the part of the more significant individuals to do too much, so that little or no time or physical and mental energy is left for meditation or contemplation, either concious or unconcious. Even children on their way to school take a bus for a few fare stages, where their fathers walked a mile or often more with physical benefit. This maladjustment to life shows itself in many symptoms, including an insistent demand to be amused by television, radio and cinema instead of by achieving amusementt hrough the patient and constructive acquisition of skills, e.g., of a musical instrument played within the family circle; indulgence in sport secondhand from a palatial grandstand instead of at first hand from within a humble local team; and the forced gaiety of often only superficial levels of the personality and therefore unsatisfying. It again is not coincidence that the syndromes of peptic ulceration, high bloodpressure and heart disease are on the increase, especially among those who occupy responsible positions in our disjointed civilisation. These syndromes are surely often preventable in the individual in spite of any predisposition of temperament, if he lived (or were allowed, by society, to live) his life at a reasonable pace.

The Victorians are often derided, but was their civilisation with its accent on discipline, moral responsibility and personal industry so much less favourable to family stability than ours? Child neglect must be considered against this background of excessive urbanisation and social maladjustment due to our present unhealthy way of existence, in spite of conditions of unprecedented social security and

material comfort for the masses.

It is vital that social workers realise that their work with and on behalf of human personalities has well marked limits, by virtue of the very fact that it is among human personalities that they work. This fact is appreciated by hospital almoners, who are trained to give the patients with whom they deal what they consider to be a factual survey of the position and then suggest a course or alternative courses of action. They recognise that the patient has the right to choose which course of action to take or to reject their advice altogether, and they take no umbrage if their advice is, in fact, rejected. The health visitor has to take particular care in this regard, for unlike the almoner she teaches with authority from her highly specialised medical knowledge gained by long years of professional training, and is apt to be dogmatic. This is especially liable to happen in this country when the question of the large size of families comes under consideration. It is very difficult in this connection for the health visitor not to be influenced, consciously or unconsciously, in her appreciation of the desirable size of a family, by her own upbringing or her own standard of material comfort. The Exeter Child Care Committee did not find many families of six or more children in this series (eight families). In the writer's experience as a school medical officer, the happiest mothers and children he has met included those of large families True, these individuals were not rich in material possessions, but they obviously gave each other so much in affection and appreciation and in such lessons as mutual tolerance and care that they possessed riches indeed. While obviously there do exist families in which more children would be undesirable it must be realised that the decision to have, or not to have, further children rests with the parents concerned, and that a married couple of reproductive age have an inalienable right to parenthood. Children are a blessing and not a penalty or a handicap. One-child families usually lead to emotional and social neglect of the child. From the national aspect it is quite conceivable that the present stirring of much more populous nations with much higher birth rates may herald an uncomfortable realisation by the Western Nations of the folly of the fashion for small families accepted in our present century

The child has material needs (overstressed in our times), mental needs, emotional needs and spiritual needs. He should have stability of surroundings which include the home and the people around him and the sense of security that goes with these, true affection, adequate food, clothing and cover, proper appreciation by his loved and admired ones and a full social and scholastic education. He must be liked for his own sake and accepted as a full member of the family group. Education is one whole and aims at the formation of a complete character that will be able to stand up successfully to the buffets of adverse circumstances and to temptations, and aims at helping the child to live as well as to make a living. Several points of importance in the upbringing of a child need to be discussed here and their absence from a neglectful home noted. A reasonable degree of regularity of bathing, feeding and being played with, against a background of affection, during a baby's early months is most important. This routine is most important, not only for the sake of good habits later on, but also for the breeding of confidence in his parents. However, in these neglectful and often problem families, lack of routine is a dominant feature. Young children are even more sensitive to atmosphere than adults, and thus family quarrels and disagreements should be kept from the sight or hearing of the child. It is noticeable how often marital disharmony is found in the homes of cases referred to the committee. the child is to develop as he should, he must be surrounded from the beginning in an atmosphere in which the basic emotions are kept under control. Domestic quarrels upset children much more than is usually appreciated and may sow the seeds of future difficulties, including an unnatural fear of one of the parents. As the child grows older punctuality for meals should be observed and regularity also observed in such things as going to bed, getting up in the mornings, washing, etc., but again non-observance of these habits is usual in such households. 'The parent's obligation includes that of sex instruction of their children, either by themselves or, if they feel incapable of giving such instruction, by some capable person in their place. This rule appears to be usually observed by default in most of such families, and the committee is often much concerned lest adolescent girls pick up promiscuous habits and adolescent boys get into trouble sexually. It is difficult to believe that the right attitude to marriage is inculcated into these children. These adolescents are at a stage of uncertainty and fluidity in their emotions and character; they look for strength and guidance and it is difficult to see where they find these. It must be realised that the parents are more significant than the school-teachers, for parents have the children for two-thirds of the day and teachers cannot be expected to transform children when they only have control over them for a minority of their time. The sad conclusion seems to be that unless these families can be reformed they tend to be self perpetuating.

Over-indulgence in alcohol was not a prominent factor in these cases. It must be remembered that over-indulgence in alcohol usually has a psychological cause in the background i.e., it is a symptom and not a disease per se. Such over-indulgence to the extent of being detrimental to the welfare of the family is usually due to a defect of the will and such a

defect usually shows itself in other directions, leading to neglect of the home. There is the danger of treating symptoms and overlooking the real cause of the condition, and it is unlikely that a defect of the will will respond to purely medicinal therapy, logical argument or moral exhortation by themselves. One must be careful of the trap of attributing too much directly to alcohol.

Stability of marriage is absolutely vital for both the stability of the nation and the upbringing of children. If we are to have a stable community life, marriage must be anticipated as a permanent contract and entered upon as such, not assumed lightly and later broken lightly. The key note of the marriage contract must be "till death us do This has always been stressed by the Church and is now officially also stressed by the Registrar-General, who has issued to all Register Offices a notice to be prominently displayed, which draws the attention of those being married there that the contract they are entering into is intended to be of a permanent nature. Broken families tend to produce broken families, in the next generation, for how can the children of a broken marriage be expected to give a full share to their own marriage when all they can remember is the selfishness and bitterness at the root of their parents' divorce or separation?

Certain of the parents of these children were of subnormal intelligence, and thus pose a problem, and a challenge, to the rest of society. Again social workers must be careful not to allow subjective criteria to dominate their approach to this problem. It must be realised that these high grade feeble minded (for such these parents usually are) represent only one portion of the frequency distribution curve of intelligence and balance up the clever intellectuals on the other side of the curve. These individuals have as much a right to live and to enjoy the pleasures of parenthood as the rest of the population. It should not be forgotten what the Galton Professor of Eugenics at London University wrote in The Lancet of September 30th, 1950,-" I do not think that the mass of defectives and subnormals is steadily growing. The genetical constitution of future generations is not, I believe, likely to be jeopardised by allowing fertile high grade defectives to have offspring." The community must accept these backward people and their families, and give the extra attention needed to train them in homemaking and child-rearing. Apart from mental subnormality, mental illness in the parents has been quite marked in this series; here a different set of problems is encountered.

Preoccupation with these families and their dirty and neglected houses must not drive us to commend the opposite extreme. Too much emphasis on cleanliness and tidiness to the exclusion of love may lead to highly undesirable results in children. The head of a remand home for the worst cases of adolescent delinquent girls gave the writer as her considered opinion that many of her girls took the initial step to delinquency because their mothers had been too house-proud, and had caused their homes to be "lovely but unloved." Just as love has a habit of flying out of the window when poverty comes in by the door, so filial affection flees in the face of maternal obsession with meticulous house

As has been said, physical cruelty was not a prominent cause for referral in these Exeter cases. Mental cruelty is more hard to define than physical cruelty, and is often an unconscious side-product of anxiety in the parents. It is best to limit the term "cruelty" to situations in which malice is present. A little reflection will show that some physical and mental suffering is inevitable in the course of childhood, and indeed is necessary to the adequate shaping of character and enlarging of experience. One is reminded of the musician who was told by an older man that he would never show his full capacity as an instrumentalist until he had had his heart broken. Provided the suffering is not unduly prolonged, resilient youth will not suffer ill-effects from it.

Ill-health in the mother was often a factor. In our patriarchal society it is very inadequately realised how much work a housewife and mother has to do, not that to run a modern home well on a small income and in a punctual and

economic way, requires just as high an intelligence as many of the academic jobs now open to women. If to this workload is added the difficulty of inadequate and inefficient technical equipment (e.g., inefficient stoves, lack of bath, etc.) then if chronic ill-health is also present it is often the last straw. Many women accept chronic ill-health and chronic anaemia as Eve's lot in life, and do not seek treatment. Often these women suffering from permanent ill-health have to cope with domestic conditions that would defeat a teacher in domestic science. Is it any wonder they give up the unequal struggle, lose heart, and allow the waves of squalor to close over them?

Finally it must be realised that the degree of civilisation of a nation is not to be measured only by the extent of installation of a water carriage system of sewage disposal, controlled tipping, street lighting, etc. Non-material matters are, in the long run, more significant than material things. A correct evaluation should desire a good physical environment for children, but it is possible for this environment to be materially improved indefinitely while the non-material

aspects are neglected.

The improvement of the lot of children neglected in their own homes can only be achieved by careful social welfare continued for long periods. Great patience is required by social workers in this field and disappointments and lapses have to be expected and accepted. Nevertheless families must not be regarded as hopeless, and in its experience to date this Committee has been justified in maintaining a sanguine approach. This is so as regards problems of the moment; as regards the future surely the answer lies in the education of the children. It is hoped that one of the fruits of the education given in our secondary schools will be a decrease in the future in such families in which children suffer neglect. It must be remembered that girls of subnormal intelligence tend to marry young and often have pre-maritial conceptions, and any such consequent forced marriages very often turn out badly. As it is the woman who is the more significant partner in the building up and maintaining of a home, it is obviously desirable that girls of subnormal intelligence should have particular attention paid to their education for

I wish to make full acknowledgement to Dr. E. D. Irvine, Medical Officer of Health, Exeter, for help, advice and encouragement in the writing of this paper, and to thank him for allowing details of child care in Exeter to be drawn upon in its compilation.

PREVENTIVE MENTAL HEALTH IN THE MATERNITY AND CHILD WELFARE SERVICE*

In introducing the report† of the joint Study Group set up by the Tavistock Clinic and the Public Health Department, L.C.C., Dr. John Bowlby referred to the high incidence of psychiatric disturbance, and also pointed out that effective preventive measures could only be based on a well-founded theory of actiology. Though there was still debate as regards what fraction of cases was accounted for, there was now wide agreement that much mental ill-health had its origins in the young child's relationships within the family. The spreading of more accurate knowledge regarding the wide range of the norms of healthy child development and administrative action designed to avoid separating young children from their mothers whenever possible would both be useful. However, the biggest single area for work lay in helping parents in regard to their total emotional attitude to their children. If a parent was over-anxious, overprotective or over-possessive it was no use telling him or her not to be. These unfavourable attitudes had intelligible origins in the parent's own past experiences, for example, a mother might be over-anxious because one of her own siblings had died when she was young, or a mother might be over-possessive through not having had love herself during her own childhood.

A crucial problem arose as to who should undertake work designed to help mothers with problems of this kind. There were many psychiatrists who felt that helping mothers with emotional problems was such skilled work that it should only be attempted by those with specialist training. Others believed that not only were there too few specialist workers available for all cases to be referred to them, but that these problems were so ubiquitous that members of other professions were, in any case, enmeshed in them in their daily work. It seemed to the Tavistock members of the Study Group that there was a big contribution which medical officers and health visitors working in the M. & C.W. Clinics could make in their day-to-day work with the ordinary parents of healthy children if they knew more about emotional problems, their nature, origins and management. They could then help with all the less difficult cases even if there would remain many which they would feel unequal to tackle.

If this view was accepted, as it had been by the Study Group, the problem became one of how knowledge and skills of this kind should be taught. Experience showed that lectures were rather ineffective, as also were presentations of theory. What had been found useful was the clinical discussion with a psychiatrist and P.S.W. of the cases which the public health workers were themselves engaged upon. Not only did the public health worker get help with that case but, if such case conferences became established practice, the general principles of approach would gradually emerge.

Dr. Bowlby emphasised that to acquire an understanding

and skill in handling emotional problems needed time, since it often involved considerable emotional re-orientation in the workers concerned. Weekly case conferences over a period of months or years was likely to be the most effective training process. Since work of this kind was not to everyone's liking, it was essential that it be voluntary. Quick results could not be expected and a programme of this kind would in its early stages have to feel its way forward slowly.

Dr. W. G. Harding, Dep. Divisional M.O., L.C.C., then outlined the practical proposals contained in the report of the Study Group. He stressed the need for better pre-entry training and then concentrated on methods of in-service training of existing public health staff. The Study Group considered that this should be done in two ways, first by broad orientation of medical and nursing staff and second by a much more intensive training of a relatively small number of doctors and health visitors. In both approaches it was essential to link up individual child guidance and child welfare teams. By broad orientation was meant introduction into basic principles of mental health. Intensive training envisaged discussion of individual cases between the child welfare and child guidance teams so that the public health staff would gradually acquire insight, experience and clinical skill in the recognition of factors which may give rise to emotional disturbance and maladjustment and in dealing with them in their early stages.

Such case conferences would be conducted at child welfare centres and case histories provided by the centre staff and then discussed with the child guidance team. In the normal course of events the child guidance staff would not themselves see the mothers and children though there was no reason to exclude that possibility categorically. Where cases were found to require closer attention and follow-up then could be given by the method of case consultation, referral to the child guidance clinic would have to take place either straight away or at some later stage but there would then be the considerable advantage of continuity of information and attention. Guidance could also be given to health visitors in the case of mothers refusing to attend the child welfare centre but accepting home visits.

In the remainder of his talk Dr. Harding dealt with practical considerations. He also mentioned the possibility of holding group discussions with parents and stressed the need of at least some evening meetings so that the father, too, could attend. The Study Group had felt that the public would readily accept these proposals, which were in no way revolutionary so far as child welfare work was con-

^{*}Report of a discussion by the Metropolitan Branch, Society of M.O.H.

[†] Medical Officer. (1954). 92, 303.

cerned but presented merely an extension of existing facilities

and of present practice.

Dr. Harding concluded by posing the question whether preventive mental health should really be the function of the Public Health Service. He reminded the meeting of the traditional function of the service in "filling the gaps" and expressed the hope that the service would once again

adapt itself to the needs of the community.

In the discussion which followed, Dr. Fanny Wride, psychiatrist in one of the L.C.C.'s child guidance clinics, said that she had had some experience of this work from both aspects. For two years after the special clinic at Holborn was set up, she continued to do one session a week at the Welfare Centre, where she had an excellent Health Visitor for this type of work, and they tried to work on the basis suggested in the report. Nevertheless, she soon found that she was obliged to refer cases to the special clinic because there was no time to deal with them in the Welfare Centre.

She completely agreed with the theoretical concepts in the report. She would emphasise paragraph 11 (c), though she usually stated it simply thus: "The attitudes of parents towards their children are influenced by their own early experiences, particularly by their unconscious attitude towards these experiences which they repeat or to which they react when similar situations arise in connection with their children." She emphasised, too, the statement at the end of this paragraph that such cases required "assistance" of a more skilled and specialised kind. These are the cases towards which their efforts have been directed. During the 10 years since records had been kept, they had had 760 cases through her clinic.

She agreed that doctors, health visitors and parents should be included in schemes for the dissemination of psychological knowledge, but stressed that it was a slow and

She challenged the statement that no Child Guidance Clinic had provided a preventive service. In the Holborn Clinic they did not give advice but tried to help the mother to see what her problem was and so enable her to change her attitude, conscious and unconscious, towards the child.

The scheme put forward was a useful educative approach but not a substitute for a psychiatric service, and never could be. The case conference between the C.W. Centre staff and the psychiatric consultants could not be an adequate substitute for the direct interview with the case.

She did not agree that there were not at present enough specialists qualified to staff an ideal psychiatric service, at any rate in London. The difficulties were other than lack

The principle of voluntary selection of candidates for training in this scheme was a good one in theory, but though many of the more able and intuitive would come forward, so would the severely neurotic. Selection might become

She asked how did one tell a psychiatrically untrained person to recognise unconscious anxiety? Presumably through symptom formation, but a symptom might mean one of many things, and how could anyone interpret secondhand with confidence. This was the crux of the problem,

on which the scheme will stand or fall.

Whilst she agreed in theory with all that had been said about the close liaison between all workers, medical and lay, in the welfare centre, in practice it sometimes did not work. Some health visitors responded and could take full part in the work, others, because of their own problems, were quite unable to do so.

She agreed with the recommendations about training for D.P.H. and D.C.H., particularly the latter. She found doctors in post-graduate training responsive and enthusiastic and several followed up the interest aroused by a visit to the

clinic and further private discussion.

To sum up, she would say that the scheme was a good one if it was put forward as a means to give increased knowledge and awareness of the emotional factors in early human relationships and child development. But it would not, in any measurable time be an adequate substitute for the expansion of schemes such as were already in operation in Divisions 1 and 3.

Dr. Morris, paediatrician, welcomed the report but deplored the omission of a paediatrician from the Study Group. Dr. Dorothy F. Egan stressed the importance of conducting research into the success of the scheme right from

the beginning.

In his reply Dr. Bowlby said that he was much encouraged by the interest the proposals had aroused. Although Dr. Wride had far more experience in this field than he had, he was not so pessimistic of what could be achieved. Dr. Mackenzie and Mrs. Irvine, of the Tavistock Clinic, had had over a year's experience of a regular weekly case conference with public health personnel in St. Marylebone and both sides felt it had been fruitful. Only further experience in other centres would tell us whether we were on the right lines or not. Meanwhile, it must be recognised that the plan was still experimental and not suitable as yet for wide application.

Dr. Harding also replied briefly and, referring to Dr. Morris's point, said that it had been essential, in the interest of constructive work, to keep down the number of members

Dr. J. A. Scott, Medical Officer of Health, County of London, proposed a vote of thanks and in so doing reminded Dr. Morris that medical officers attending child welfare clinics were indeed paediatricians in their own right, as far as the normal development of young children was concerned.

Society of Medical Officers of Health

NOTICES

ORDINARY MEETING, SEPTEMBER 22nd

Notice is hereby given that an Ordinary Meeting of the Scciety will be held in the Apothecaries' Hall, Blackfriars Lane, Ludgate Circus, London, E.C.4, at 5.30 p.m., on Thursday, September 22nd, 1955. The business of the meeting will include the installation of Dr. Charles F. White, O.B.E., Medical Officer of Health, City of London, as President of the Society for the session 1955-56. Dr. White will deliver his presidential address to the meeting.

Full agenda, with the names of candidates for election to membership on September 22nd, will be included with the

September issue of PUBLIC HEALTH.

S. R. BRAGG. Administrative Officer.

July 29th, 1955.

MATERNITY AND CHILD WELFARE GROUP

The first meeting of the session 1955-56 will take the form of a Cocktail Party to be held at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.I, at 6.30 p.m. on Friday, October 7th, 1955. At 7.30 p.m. Dr. Catherine M. Gray, Assistant Medical Officer, M. & C.W., Leeds C.B., will be installed as President of the Group for the session.

REPORTS

MIDLAND BRANCH

President: Dr. J. W. Pickup (C.M.O.H., Worcestershire). Hon, Secretary: Dr. W. R. Martine (Admin. and M.O.H. (Gen. Purposes), Birmingham).

The fourth meeting of the session was held at Lancaster Street Welfare Centre, Birmingham, on Thursday, February 3rd, 1955, at 3.0 p.m. The President was in the chair and 34 members attended.

Prophylaxis by Inoculation

Papers on this subject were given by Dr. L. B. Holt, St. Mary's Hospital Laboratory, and Miss M. Barr, Wellcome Research Laboratories.

Dr. Holt opened with comment upon the variability of the earlier preparations of APT and the development at St. Mary's Hospital of PTAP, which had a higher antigenic potency than APT, and stated that all other laboratories could now produce a product with the same high antigenic efficiency.

The Ministry of Health had instituted field trials in 1949 to determine the ability of PTAP to prevent diphtheria as distinct from its ability to induce production of anti-toxin; their report

had been published only recently. In 1950, papers by McClosky and Martin had strongly suggested an association between recent inoculation and the site of paralysis in a number of cases of poliomyelitis. The problem was, therefore, how to maintain a high immunisation rate against diphtheria. Since muscle trauma appeared to be a predisposing factor, Bousfield suggested the use of fluid purified toxoid, administered subcutaneously in three spaced doses, and subsequently showed the high efficiency of such material in a clinical trial. This purified toxoid, in simple solution, was adopted by the Ministry in the autumn of that year.

Recent investigations by Valquis, Bousfield and the Wellcome

team had shown that small babies, age down to two months, respond well to diphtheria prophylactic: and, since pertussis causes the greatest mortality in the first year of life, inoculation of infants with pertussis vaccine was being increasingly practised despite the poliomyelitis risk. Thus, provided the admixture of the two antigens did not seriously interfere with their separate efficiency, advantage would result from their combined use in early infancy. Clinical trials employing both Schick Test and serum antitoxin titrations had shown the vaccine actually to be an adjuvant for the toxoid. The several advantages of simultaneous immunisation in early infancy included the maintenance of a high immunisation rate against diphtheria, immunisation against pertussis at the age of greatest danger, reduction in the number of injections, inoculation at the age of greatest clinical ease and no loss of protection against diphtheria as a result of inoculation so early in life,

Although absorbed toxoids found no place in the above, they still had a place in the primary immunisation of older children, and PTAP would seem to be the reagent of choice especially where there was doubt as to the child receiving a second inocula-A small dose of adsorbed toxoid would, moreover, seem preferable as the pre-school booster dose, administered sub-

cutaneously.

As to the future, recent work on results from the addition of tetanus toxoid to combined diphtheria—pertussis prophylactic showed that, provided the balance of antigens was correct, response to the additional antigen was satisfactory, and no efficiency of the others was lost. Many tetanus deaths occurred where no causative wound can be found, and those lives could be saved by active immunisation. If this became general, the unnecessary risk of serum reactions from indiscriminate use of ATS would end, although "marking" of the immunised subject would be a very real one and might possibly require adoption of an internationally accepted tattoo code.

Summarising, therefore, in the future we might have:—
(I) Vaccination at four to eight weeks: possibly with polio

vaccine in two to three years time.

(2) Three subcutaneous injections of diphtheria, tetanus, pertussis prophylactic at intervals of one month, with no mineral carrier, commencing at three months.

(3) Pre-school small booster dose of adsorbed tetanus diphtheria toxoids, given subcutaneously.

These reagents, the fluid toxoid for the infant, and the adsorbed toxoid for the pre-school child were available to-day and Dr. Holt could see no case against their general acceptance.

Miss Barr referred to the advantages of combined immunisation. She said that the advantages of combined over single prophylaxis against diphtheria and whooping cough were not confined to the reduction of the total number of doses needed to confer adequate active immunity. Preliminary results in guinea-pigs (Barr and Llewellyn-Jones, in the Press) had shown that secondary stimulation with one prophylactic might interfere with the response to a course of immunisation with another type of prophylactic if this course was started as long as 28 days after the secondary stimulation: if the interval was less than 28 days interference was greater. These results suggested that an interval of at least 28 days, preferably longer, should be left between the last injection of one course of immunisation and the first injection of another course with a different type of prophylactic.

Combined immunisation against diphtheria, tetanus and whooping cough was practised widely in other countries. If a course of such combined prophylaxis was administered to young babies there was at the present time only one factor which might interfere with the development of satisfactory immunity to the components of the prophylactic. This was the presence of passive, maternally conferred diphtheria antitoxin: at present very few mothers had been actively immunised against tetanus. published work (Barr, Glenny and Butler) had shown that interference with the response to diphtheria toxoid occurred in a fair proportion of babies given the first dose of a "fluid triple prophylactic" at six weeks. If immunisation was delayed until the age of 12 or 16 weeks, satisfactory results (over 99%) were obtained. Objections were frequently raised in this country against active immunisation against tetanus, on the grounds that, unless it were universally adopted, tetanus antitoxin would still be given to all casualty cases. Active immunisation was, however, practised extensively elsewhere and should be encouraged.

Dr. W. H. Bradley, Ministry of Health, in opening the discussion, proved most informative on the incidence and mortality of diphtheria, whooping cough and tetanus at various age groups from under 3/12 to 15 years. Drs. Owen, Bynish, Curtois, J. F. Galloway, Tabbush and Starkie took part in the general discussion, and Dr. J. R. Preston, seconded by Dr. Curtois, moved a cordial vote of thanks to the speakers.

The fifth meeting of the session was held at Lancaster Street Welfare Centre, Birmingham, on Thursday, March 3rd, 1955, at 3.0 p.m. The President was in the chair and 30 members

Is the Premature Baby worth saving?

Giving a paper on this subject Dr. V. Mary Crosse said that premature babies, i.e., $5\frac{1}{2}$ lb. or less, were responsible for 60% of the neonatal deaths and 40% of the infant mortality in England and Wales; 45,000 premature babies were born each year and, with the falling birth rate, there should be greater effort to save This cost money and would not be worth while if they turned out to be weakly, stunted, underweight, maladjusted or mentally defective, and became a burden on the community

An investigation had been going on in Birmingham since 1945, with a follow-up of over 1,300 p.a. up to one year of age. long term study of 1,500 born in 1948-49 was also being made with controls. She also referred to the work of Alm (Sweden) and Blegen (Norway) and to the national British survey undertaken jointly by the R.C.O.G. and the Population Investigation

When assessing development of premature babies, the cause of the premature birth was important-congenital malformation, plural birth, trauma, pre-natal maternal complications and small parents-while the excess of females and poor financial circumstances were also important.

In any controlled investigation, congenital malformation should be excluded, and controls should be matched for sex, plurality birth order, size of parents, and financial circumstances. All these factors influenced birth weight and subsequent development. It was also necessary to make allowance for degree of prematurity, i.e. to deduct weeks of prematurity from chronological age

The Birmingham one-year survey showed average height and weight slightly lower than controls: but 57% female, c.f. 46% in the controls; 6% illegitimate, c.f. 2·1% and 1·0% congenital malformation, c,f. 0·5%. In Sweden where males were matched with males but with no other form of control, the premature showed slightly lower height and weight at 20 years. In Norway with matching of social background there was the same slight difference. In the British national survey, however, with matching for sex, birth order, age of parents, social class and locality, Douglas and Mogford reported 36% caught up or passed controls in weight and 44% in height at four years. At the same time the mothers of those lagging behind were significantly shorter and lighter than the mothers of controls.

As to physical and mental handicaps, congenital malformation was a cause, not effect, of prematurity-25% were prematurely born. Other defects resulted from birth injury, kernicterus or retrolental fibroplasia and included hydrocephaly, spasticity, deafness, mental retardation, and blindness. There lay the deafness, mental retardation, and blindness.

true hazard of prematurity.

Alm found a moderately higher incidence of disorders associated with birth injury among prematures surviving to second or third year while Blegen found more defects as to vision, hernia and nervous manifestations. Douglas and Mogford on the other hand found impaired vision more common in the premature at age four, yet gross defects were equally common.

As to health, all four surveys confirmed an excessive death rate from congenital defect and infection during first two to three years,

thereafter it was no greater than in controls.

As to social adjustment, Alm found no significant or probable difference, based on fitness for active service, receipt of public assistance, income earned and conviction for crime or drunkenness.

Summarising Dr. Crosse said that if a premature baby were free from congenital malformation and escaped complications of birth and neonatal period, and if allowance were made for degree of prematurity, the course of development could, and with good obstetric and paediatric care should, be normal.

What was to be the result of saving more such babies each year? Would it mean a lower average height and weight or the need for more hospital beds or accommodation for physically and mentally handicapped? The British Survey showed a very slight increase in stunted children in prematures, c.f. controls, and a very slight increase in hospital admissions in the first two There was only a fractional increase in mental and physical handicap and more than half of the hanpicapped was due to congenital malformation and not to prematurity. Alm in Sweden was convinced that prematures were no more a burden

on the community than controls.

In spite, therefore, of the hazards of relatively high mortality up to two to three years, susceptibility to infection to two years, increased risk of birth injury and kernicterus and retrolental fibroplasia, good obstetric and paediatric care could prevent some if not all, and she felt that premature babies born free from

on the invitation of the President, who complimented Dr. Crosse on a most inspiring paper, Drs. Starkie, Binysh and Griffin asked questions to which Dr. Crosse ably replied and a vote of the children of the president of the pre thanks moved by Dr. Griffin and seconded by Dr. Campbell

Mackie was accorded with acclamation.

NORTH WESTERN BRANCH

President: Dr. A. V. Stocks (M.O.H., Eccles M.B., Div. M.O., Lancashire).

Hon. Secretary: Dr. J. S. G. Burnett (M.O.H., Preston C.B.) The annual meeting of the Branch was held at Thelwell Massey Hall, Lymm, on Friday, June 10th, 1955, when 32 members accompanied by a large number of guests attended.

The headmistress, Mrs. Holland, gave a short account of the opening of the school and of its activities and the members and guests were subsequently conducted round the building and the attractive grounds. Dr. Davies on behalf of the assembled company thanked the President for making arrangements which had enabled all present to have an interesting, pleasant afternoon and the headmistress for the delightful entertainment she had provided and for the opportunity given to the members to become more closely acquainted with the school and its

The annual meeting of the Branch was held, when apologies

from 15 members were submitted.

The minutes of the annual meeting held on Friday, May 21st,

1954, were read and approved as a true record.

The Chairman of the Council of the Society, Dr. C. Metcalfe Brown, reported on the consideration that had been given during the past year to the organisation of the Society and of the new arrangements that would prevail from the beginning of the coming session.

The annual report of the Honorary Treasurer was circulated

and after discussion was approved.

The election of officers for the year 1955/56 took place as follows

President: Dr. J. S. G. Burnett.
Vice-President and Honorary Secretary: Dr. A. V. Stocks.
Honorary Treasurer: Dr. J. Yule.

Representative to the Council: Dr. J. S. G. Burnett,
Standing Deputy: Dr. J. Yule.
Committee: Drs. H. G. M. Bennett, C. Metcalfe Brown,
F. W. C. Brown, J. B. M. Davies, J. G. Hailwood, J. Innes,
E. M. Jenkins, M. Sproul, C. H. T. Wade and K. K. Wood.

It was resolved that the term of office for office holders elected annually should not normally exceed three years, though with a possible extension to a fourth or fifth year and it was further resolved that the Branch Committee consider the question of representation on the Council of the Society with special reference to the relative weight of representation from the different branches and groups

WELSH BRANCH

President: Dr. Amy L. Jagger (A.M.O.H., Glamorgan). Hon. Secretary: Dr. R. T. Bevan (Dep. C.M.O.H., Glamor-

The Welsh Branch visited Stratford on Avon on May 21st, the party consisting of 29 members and their wives. Dr. Jean M. Mackintosh, the President of the Society, honoured the Branch

by her presence The South Warwickshire Children's (Recovery) Hospital was

visited in the afternoon.

Mrs. Davies, the headteacher of the school, described the educational activities of the hospital. She considered that mental activity helped in the physical recovery of the children. Mental stimulation was, therefore, one of the important aims. tunities for creative self expression were stressed in helping the children to regain self confidence. A feature of the education was the variety of activities. The instruction enabled the children to maintain educational progress and so avoided a sense of inferiority when they returned to the ordinary schools, Instruction in the "three Rs" was, therefore, not neglected. It was essential to keep the children in touch with the outside world. Mrs. Davies described a normal day's work but said the

time table was elastic and tended to follow the child rather than the child follow a time table.

Dr. MacGregor then addressed the Society on the medical features of the hospital. The minimum stay was three weeks, but most children were at the hospital for about six months. The various types of medical conditions treated were considered. (i) Children in the subacute stages of medical illnesses, e.g., nephritis, rheumatism; (ii) Primary tuberculosis, including children who had had complications following tuberculous meningitis; (iii) some children regarded as incurable invalids, e.g., with complications of spina bifida, muscular dystrophy, malignant growths; (iv) children requiring a long period in plaster were also admitted. He added that (v) the hospital was also of value in the treatment of behaviour defended. was also of value in the treatment of behaviour defects, and in this respect it was useful as a diagnostic unit in assessing the educability of a child and (vi) the treatment of children who had symptoms as a result of faulty parental management was also carried out at the hospital; (vii) there was another group of children who had had thoracic surgery; and (viii) yet another group were described as the catarrhal group—children with transient lung shadows.

Dr. MacGregor then demonstrated some of the children who

exhibited interesting clinical features

The Branch was entertained to tea at the hospital. The President expressed the thanks of the Branch to the speakers, and also to the Matron of the hospital for the most generous hospitality.

Following an informal dinner Dr. Jean M. Mackintosh spoke to the Branch about her visit to the Antipodes. She stated that in Australia much interest was shown in the services in this country, particularly the After-Care Service, the relationship between curative and preventive paediatrics, and the care of

deprived children.

Dr. Mackintosh described the services in New Zealand and made particular comment about the dental nurse and dental health education. During her talk Dr. Mackintosh recalled many of her amusing experiences and stressed the intense interest which the people in Australia and New Zealand have in the bealth services of this country.

Dr. C. W. Anderson moved a vote of thanks to the speaker for her delightful, interesting and instructive talk.

WEST OF ENGLAND BRANCH Southern Area

President: Dr. L. Solomon (A.C.M.O.H., Devon). Hon. Secretary: Dr. T. Peirson (M.O.H., Plymouth C.B.).

An ordinary meeting of the Southern Area of the Branch was held on Friday, May 27th, 1955, at the Urban District Council Offices, Tavistock. Thirteen members attended.

The Hon. Secretary reported that he had nominated Dr. Solomon as representative on the Executive Committee of the Torquay Division of the B.M.A. and this was approved.

Dr. E. Allen-Price gave a paper on the relationship between cancer death rates in certain parishes of West Devon and the mineral deposits in these localities. It was resolved that the Hon, Secretary endeavour to arrange with the Director of the Cancer Registration Bureau, Plymouth, for a split up of the numbers of cancer registrations, if possible, into sites of the cancer and the parish in which the case occurred, at least relating to the parishes which Dr. Allen-Price had referred to in his paper.

Members then re-assembled at the Duke of Bedford's estate, "Endsleigh," where they had tea after perambulation of the delightful gardens and woods situated in the Tamar Valley.

YORKSHIRE BRANCH

President: Dr. C. G. K. Thompson (M.O.H., Wakefield

Hon, Secretary: Dr. H. L. Settle (M.O.H., Doncaster C.B.). A meeting of the Branch was held in the Town Hall, Wake-

field, on Friday, April 22nd, 1955, at 5.30 p.m.
Formal business alving been disposed of, light refreshments were served after which members proceeded to the Criminal Investigation Department of the West Riding County Constabulary where a very interesting evening was spent. We were first taken to the modus operandi section where all facts which would be of help to the police in identifying criminals are filed. A most comprehensive filing system is employed. The efficiency of this filing system was well demonstrated by the production in a matter of seconds by the lecturer of the records of confidence tricksters of whom members of the Branch had had experience in the past. This section is always open and supplies information upon enquiry to police forces all over the British

We next visited the fingerprint section where again accurate filing is the secret of success. Over 500,000 records are housed in this section. Methods of taking fingerprints and rendering them visible on various objects were demonstrated and the system of classification briefly described.

Our final visit was to the photographic section where the various types of equipment used by the police photography departments were exhibited and described and examples of the work this section is called upon to undertake were shown.

This most interesting visit terminated at 8.50 p.m.

A meeting of the Branch was held on Saturday, May 14th, 1955, at the South Holderness County Secondary School, Preston, near Hull.

This meeting involved two changes from our previously established practice, namely of time and place-Saturday afternoon instead of Friday evening, and in a part of the county not previously used for meetings. These changes were introduced by the President in order to enable members from the East Riding area to take part in the Branch's activities which they normally find difficult to do due to the time and place of

our regular meetings.
Dr. Hutchinson, Medical Officer of Health, Hull County Dr. Hutchinson, Medical Omcer of Treatin, Annual Borough, introduced Mr. Rhodes, Chief Food Inspector of "Slaughterhouses." The Hull, who addressed the meeting on "Slaughterhouses." The speaker reviewed the existing legislation relating to slaughterhouses, from the introduction of licensing and registration under the Town Improvement Clauses Act of 1847. The difficulties of meat inspection during the war and post-war period were discussed and the arrangements introduced in Hull following the removal of meat rationing were described. Mr. Rhodes considered in some detail the Slaughtéring Act 1954, drawing attention to problems which had been encountered and describing the solutions which had been applied.

A description of modern methods of slaughtering followed with details of the problem of blood-splashing which had been encountered in pigs killed by means of a captive bolt gun and which was found to be due to either the use of too heavy a cartridge or too long a time elapsing between the shooting and the sticking of a carcase. Mr. Rhodes was of the opinion that the standard of meat inspection has been well maintained since de-control and that good co-operation exists between the inspectors of Hull and the neighbouring authorities. The hours worked by meat inspectors can be very long and inconvenient

and these were adversely criticised by the speaker, who pointed out that whilst inspectors may be the servants of the public they should not be the slaves of a particular trade.

Following the paper a number of members took part in a discussion, thereby testifying to the value and interest of Mr. Rhodes's paper. A cordial vote of thanks to the speaker was proposed by Dr. D. Payne, Medical Officer of Health, Harrogate.

NORTH WESTERN M. & C.W. AND S.H.S. SUB-GROUPS

President: Dr. Barbara Knight (Asst. Div. M.O., Lancashire).

Hon. Secretary: Dr. L. Cromack (S.M.O., Manchester).
A meeting of the Sub-Groups was held in the Public Health
Committee Room, Town Hall Extension, Manchester, on Friday, April 29th, 1955, at 5 p.m. Eighteen members were

The Catarrhal Bronchiectatic Child

The speaker was Dr. E. H. W. Deane, Consultant Chest Physician to the Wigan and Leigh Hospital Management Committee, and the Manchester Regional Hospital Board.

Dr. Deane said that bronchiectasis followed mainly measles, whooping cough and pneumonia, also primary tuberculous infection, and that we should try to prevent these conditions, or later prevent bronchiectasis developing in the collapsed part of a lung.

Modern methods included treatment by antibiotics and preventative vaccines. 43 % of whooping cough cases admitted to hospital had lobar collapse following bronchial obstruction.

He said that 19% of those with primary (25% in Wigan) tuberculous infection had segmental collapse and children were admitted to hospital, but on the whole the percentage of collapse and later bronchiectasis was much lower. Elastic tenacious mucus blocked the bronchus and causes collapse, and infection of the root glands occurred simultaneously. Bronchiectasis was more likely in the very young with weak cough and weak bronchial muscles.

Dr. Deane was of the opinion that diagnosis was difficult,

and while it was possible to diagnose a collapse clinically, x-rays were the most reliable means. He showed some x-ray films illustrating this point. He considered that early bronchoscopy was often advisable to clear a plugged bronchus. If not, the



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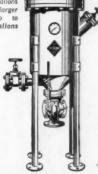
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child was left with a shrunken, fibrotic and contracted lobe, which became infected, more especially the lower lobes, since the upper tended to drain themselvs in the erect position.

Prognosis was difficult. If re-aeration occurred within nine

to six months, a lung might return to normal. If distal infection did not occur, the prognosis was good, i.e., bronchiectasis might

not develop.

As to treatment, Dr. Deane said that thorocoplasty might be used to remove intra pleural negative pressure. Often cases were found with a history of years of bronchiectasis and they must be admitted to hospital and investigated bronchographically. Postural drainage was used to dry the bronchi in the first place, then a general anaesthetic-open ether-was given and lipiodol injected. The bronchoscope was used to aspirate mucus and inject the oil, in preference to other methods such as the tube with cuff and balloon or filling the pharynx of an anaesthetised child with oil.

In some cases the upper respiratory tissues were infected from the lung and vice versa. Dr. Deane considered that in these cases liquid paraffin and nasal drops were dangerous. The infection in the upper tract should be dealt with first, before treating the chest. The general health was an important factor, and it had been found that most of these cases came from poor

homes and parents.

In treating them, postural drainage was very important. The mother of an infected child was taught how to do this. The child hung over the side of the bed while the mother percussed the back of the chest. This was carried out twice daily for 20 minutes for months, years, or for ever. As a result the lungs re-aerated and the child might recover. He should be in an open-air school or a suitable residential school. These children often relapsed on return to their homes.

children often relapsed on return to their homes.

Where surgery was necessary, the segment or lobe if functionless should be removed, with often good results. The best age for this was about eight years; it could also be done in adults, but the other lung, and parts thereof, reconditioned and repositioned themselves better in the young.

On drugs Dr. Deane said they were used when there was

an exacerbation of infection-organisms resistant to pencillin -but should not be used if avoidable, but reserved for

"umbrella" before operation and emergencies.

A discussion followed Dr. Deane's absorbing talk, and Dr. Burnett asked if games could be played six weeks after an operation. Dr. Deane said that exercises were done 24 hours after an operation. x-rays were valuable in post whooping cough or post measles cases, in eliciting early bronchiectasis which can then be treated by aspiration and lobar collapse prevented. If this is not done, poor general health may result and children become respiratory cripples. Fitness for ordinary children become respiratory cripples. Fitness for employment depends on the severity of the disease. Cases of offensive sputum are a very small percentage although, when they do occur, they may present difficulties in school.

Dr. Christian proposed a vote of thanks to Dr. Deane and

this was warmly applauded.

BOOK REVIEWS

Virus and Rickettsial Diseases. By S. P. Bedson, A. W. Downie, F. O. MacCallum and C. H. Stuart Harris. 2nd Edition. (Pp. 398. Illustrated. Price 30s.) London: Edward

Arnold, 1955

The second edition of this work has now appeared. The object of the book has been to reduce the delay before the findings of virus research become general knowledge, by presenting modern views on virology in a form that is easily digestible by those whose interests are of a more general nature. In this, the distinguished authors have been outstandingly successful.

The virus and rickettsial diseases affecting man are all considered from the clinical, epidemiological and laboratory standpoints, and where appropriate prevention and treatment are discussed. The early chapters on viruses as a group, immunity, and the natural history of virus diseases form an attractive introduction to the detailed discussion of diseases in later

Virology has ceased to be a nebulous subject, and it is here presented in its most practical form. Although the modern student is introduced to the subject as a laboratory study many of his older brethren did not have this advantage, and those who wish to keep themselves abreast of developments in the virus field will find this book invaluable.

It will be found equally rewarding to the doctor who wishes to know what types of specimen to take from a particular virus disease, to one who wishes to know the theoretical background to the stirring recent advances in the prevention of poliomyelitis, or to one who is looking for an easily readable summary of the relationship between human beings and their viruses.

The book is well illustrated, and references to the more important recent work are given at the end of each chapter. It will make a useful desk companion for the medical officer of

Industrial Dust. By Prof. Philip Drinker and Prof. Theodore Hatch. Pp. 346—Bibliography and Index 55. Price 10 dollars. New York and London: McGraw-Hill; 1955.

This book, now in its second edition, and written by equally eminent engineering and medical authorities, is a work which must command both respect and attention. The theoretical approach to determination of dust concentration and measurement is dealt with in such detail as to demonstrate the intimate relationship between engineering and medical aspects of industrial medicine.

The policy of the authors is, broadly speaking, to catalogue the numerous dusts and furnish some details regarding each rather than to dwell at length on the more common ones.

The most notable omission from the text is an adequate mention of skin conditions due to dust, particularly the widespread and increasingly common irritations caused by the new synthetic resins which appear to cause external symptoms before internal

The physical aspect of dust elimination and control is ex-tremely well written and the bibliography and index occupying one-sixth of the book clearly leave few omissions in the way of a book which is a work of reference.

Official Announcements

University of the Witwatersrand, Johannesburg, South Africa.

Applications are invited for appointment to a vacant post of Senior Lecturer in the University Department of Preventive Medicine.

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Applicants are advised to obtain a copy of the information sheet giving further details relating to this vacancy from the Secretary, Association of Universities of the British Commonwealth, 36, Gordon Square, London, W.C.1

The closing date for the receipt of applications, in South Africa and London, is September 9th, 1955.

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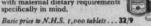
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